

**WHAT IS CLAIMED IS:**

- 1           1.     A method for enhancing contrast in a digital projector, comprising:  
2                     positioning a first optical component and a second optical component  
3     along a light path, said first optical component and said second optical component  
4     being separated by a gap; and  
5                     sealing a perimeter of said gap with a sealant.
- 1           2.     The method of claim 1, further comprising:  
2                     evacuating said gap to provide substantially a vacuum in said gap.
- 1           3.     The method of claim 2, wherein said first optical component is a  
2     digital micro-mirror device cover plate and said second optical component is a total  
3     internal reflection prism.
- 1           4.     The method of claim 1, wherein said first optical component is a  
2     digital micro-mirror device cover plate and said second optical component is a total  
3     internal reflection prism.
- 1           5.     The method of claim 1, wherein said sealant is positioned substantially  
2     along a perimeter of at least one of said first and second optical components.
- 1           6.     The method of claim 1, wherein said gap is filled with a fluid.
- 1           7.     The method of claim 6, wherein said fluid has a refractive index  
2     substantially similar to a refractive index of at least one of said first and second  
3     optical components.
- 1           8.     The method of claim 6, wherein said fluid is a liquid.
- 1           9.     The method of claim 6, wherein said fluid is a gel.
- 1           10.    The method of claim 1, wherein said gap is filled with an adhesive.

1           11.     The method of claim 10, wherein said adhesive has a refractive index  
2     matching at least one of said first and second optical components.

1           12.     A system for enhancing contrast in a digital projector, comprising:  
2                   a first optical component and a second optical component positioned  
3     along a light path and being separated by a gap; and  
4                   a sealant adapted to seal said gap substantially along a perimeter of  
5     said gap.

1           13.     The system of claim 12, wherein said gap is evacuated to provide  
2     substantially a vacuum in said gap.

1           14.     The system of claim 13, wherein said first optical component is a  
2     digital micro-mirror device cover plate and said second optical component is a total  
3     internal reflection prism.

1           15.     The system of claim 12, wherein said first optical component is a  
2     digital micro-mirror device cover plate and said second optical component is a total  
3     internal reflection prism.

1           16.     The system of claim 12, wherein said sealant is positioned along a  
2     perimeter of at least one of said first and second optical components.

1           17.     The system of claim 12, wherein said gap is filled with a fluid.

1           18.     The system of claim 17, wherein said fluid has a refractive index  
2     substantially similar to a refractive index of at least one of said first and second  
3     optical components.

1           19.     The system of claim 17, wherein said fluid is a liquid.

1           20.     The system of claim 17, wherein said fluid is a gel.

1           21.     The system of claim 12, wherein said gap is filled with an adhesive.

1           22.    The system of claim 21, wherein said adhesive has a refractive index  
2           matching at least one of said first and second optical components.

1           23.    A system for enhancing contrast in a digital projector, comprising:  
2                   a first optical component and a second optical component positioned  
3           along a light path and being separated by a gap; and  
4                   means for sealing said gap substantially along a perimeter of said gap.

1           24.    The system of claim 23, wherein said gap is evacuated to provide  
2           substantially a vacuum in said gap.

1           25.    A system for enhancing contrast in a digital projector, comprising:  
2                   a first optical component and a second optical component positioned  
3           along a light path and being separated by a gap; and  
4                   means for restricting airflow through said gap.

1           26.    The system of claim 25, wherein said gap is evacuated to provide  
2           substantially a vacuum in said gap.

1           27.    A digital projector, comprising:  
2                   at least two optical components positioned along a light path;  
3                   a gap formed between two of said optical components; and  
4                   a sealant adapted to seal said gap substantially along a perimeter of  
5           said gap.

1           28.    The system of claim 27, wherein said gap is evacuated to provide  
2           substantially a vacuum in said gap.